

- 5 substituted or tetrasubstituted by F), phenylene-1,3-diyl (unsubstituted, monosubstituted or disubstituted by CN, CH₃, CF₃, OCF₃, unsubstituted, monosubstituted, disubstituted or trisubstituted by F), thiophene-2,5-diyl (unsubstituted or monosubstituted by F), thiophene-2,4-diyl (unsubstituted or monosubstituted by F), 1,3-thiazol-2,5-diyl (unsubstituted or monosubstituted by F), 1,3-thiazol-2,4-diyl (unsubstituted or monosubstituted by F), (1,3,4)-thiadiazol-2,5-diyl, 1,3-dioxane-2,5-diyl (unsubstituted or monosubstituted by CN), tetrahydropyran-2,5-diyl, 6,6-difluorotetrahydro pyran-2,5-diyl, 6,6-difluoro-2,3-dihydro-6H-pyran-2,5-diyl, 6-fluoro-3,4-dihydro-2H-pyran-2,5-diyl, piperidine-1,4-diyl, piperazine-1,4-diyl, pyrimidine-2,5-diyl (unsubstituted or monosubstituted by F), pyridine-2,5-diyl (unsubstituted or monosubstituted by F), 1,2,3,4-tetrahydronaphthalene-2,6-diyl, decaline-2,6-diyl
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- 20 B^2 is cyclohexane-1,4-diyl (unsubstituted, monosubstituted or disubstituted by F, CH₃, CN), cyclohex-1-ene-1,4-diyl (unsubstituted or monosubstituted by F), cyclohex-2-ene-1,4-diyl, 1-alkyl-1-silacyclohexane-1,4-diyl, bicyclo[2.2.2]octane-1,4-diyl, phenylene-1,4-diyl (unsubstituted, monosubstituted or disubstituted by CN, CH₃, CF₃, OCF₃, unsubstituted, monosubstituted, disubstituted, trisubstituted or tetrasubstituted by F), phenylene-1,3-diyl (unsubstituted, monosubstituted or disubstituted by CN, CH₃, CF₃, OCF₃, unsubstituted, monosubstituted, disubstituted or trisubstituted by F), thiophene-2,5-diyl, thiophene-2,4-diyl, 1,3-thiazole-2,5-diyl, 1,3-thiazole-2,4-diyl, (1,3,4)-thiadiazole-2,5-diyl, 1,3-dioxane-2,5-diyl (unsubstituted or monosubstituted by CN), tetrahydrofuran-2,5-diyl, tetrahydropyran-2,5-diyl, 6,6-difluoro-tetrahydropyran-2,5-diyl, 6,6-difluoro-2,3-dihydro-6H-pyran-2,5-diyl, 6-fluoro-3,4-dihydro-2H-pyran-2,5-diyl, pyrimidine-2,5-diyl (unsubstituted or monosubstituted F), pyridine-2,5-diyl (unsubstituted or monosubstituted F), indane-2,6-diyl, piperidine-1,4-diyl, piperazine-1,4-diyl, pyrimidine-2,5-diyl (unsubstituted or monosubstituted by F)
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X is $-(CH_2)_n-$, where

- a) one or two $-\text{CH}_2-$ groups may be replaced by $-\text{O}-$ or $-\text{C}(=\text{O})-$ and/or
- b) one $-\text{CH}_2\text{CH}_2-$ group may be replaced by $-\text{CH}=\text{CH}-$ and one or more H of the $-\text{CH}_2-$ groups may be replaced by F

with the provisos that

- 1) n is 2, 3 or 4
- 2) two adjacent $-\text{CH}_2-$ groups cannot be replaced by $-\text{O}-$

a, b, c are each zero, 1 or 2, with the provisos that

- 1) a must be 1 when R^1 is hydrogen, F or CN
- 2) the sum of $a+b+c$ is at least 1
- 3) the radicals A and M, respectively, in the brackets may be identical or different when the corresponding index is 2.

2. An active-matrix display as claimed in claim 1, containing a liquid-crystal layer in the form of a monodomain having an unambiguously defined direction of the layer normal z of the SmC phase, where the layer normal z and the preferential direction n of the nematic or cholesteric phase (N^* phase) form an angle of more than 5° , and the liquid-crystal layer is composed of a ferroelectric (chiral smectic) liquid-crystal mixture comprising at least one compound of the formula (I).

3. A display as claimed in claim 1 or 2, wherein the liquid-crystal mixture has a spontaneous polarization of $< 200 \text{ nC/cm}^2$ and $\text{DT}(15,1)$ is > 20 .

4. A display as claimed in one of claims 1 to 3, wherein, in (I), X is $-\text{OC}(=\text{O})-$, $-\text{OCH}_2-$ or $-\text{OC}(=\text{O})\text{CH}_2\text{CH}_2-$.

5. A display as claimed in one of claims 1 to 4, wherein, in (I), B^1 is cyclohexane-1,4-diyl, cyclohex-1-ene-1,4-diyl, phenylene-1,4-diyl, unsubstituted, monosubstituted or disubstituted by F, or thiophene-2,5-diyl.

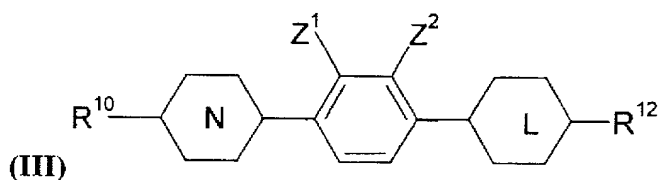
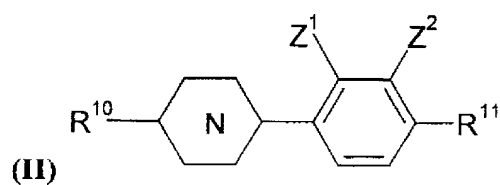
6. A display as claimed in one of claims 1 to 5, wherein, in (I),

A¹ is pyrimidine-2,5-diyl (unsubstituted or monosubstituted by F), pyridine-2,5-diyl (unsubstituted or monosubstituted by F), phenylene-1,4-diyl (unsubstituted, monosubstituted or disubstituted by F), or (1,3,4)-thiadiazol-2,5-diyl.

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7. A display as claimed in one of claims 1 to 6, wherein the liquid-crystal mixture is composed of 3 to 30 compounds and comprises at least one compound of the formula (I) and at least one compound of the formula (II) below and, if desired, at least one compound of the formula (III) below

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where:

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R¹⁰, R¹¹ are as defined for R¹, R², where additionally the terminal -CH₃- group may in each case be replaced by one of the chiral groups (optically active or racemic) below:

